

Uni-Blinds®

Innovation comes built-in



BRINGING
GLAZING
TO LIFE.

Morley

GLASS & GLAZING LTD

ScreenLine® | A brand of
pellini industrie



C System: Magnetic Manual Control By Cord, Rotation Knob Or Wand

The SL16-20-22-27C is a classic Venetian blind. It uses a patented magnetic system with manual operation for raising and tilting, incorporated within 20mm, 22mm and 27mm cavities. An external magnetic device, applied on the glass to guarantee the integrity of the glass unit, contains a cord loop and a magnet that is perfectly interfaced with the magnetic joint of the internal drive housed inside the head rail. The cord is kept under tension by a special cord tensioner applied to the glass.



S System: Slider

The SL20-22S is a manual system comprising a 14mm pleated blind integrated within a 20mm or 24mm double glazed unit. Movement is achieved by a magnetic device positioned centrally on the outer surface of the internal pane sliding across the glass surface. This external magnet interfaces with a similar internal magnet located in the movable head rail to absorb possible glass deflections, with easy adjustment possible to make it ideal for attic, dormer and skylight applications. And you can choose from 16 exclusive colours only from Morley Glass.



W Smart System: Wire-free Solar Powered

The SL20-22W Smart Uni-Blinds® system is a wire-free, battery operated, motorised blind system. A Venetian or pleated blind is encapsulated within a double glazed unit, which can be raised or lowered via a control device magnetically attached to the window or by remote control. The system operates with powerful, long-life rechargeable batteries and is equipped with a cleverly designed external energy-saving solar panel. The system can be fitted quickly and easily to all types of residential and commercial window frames and needs no maintenance.



MB System: Motorised Brushless

Our brushless motor technology in the SL20-22 27MB system is a world away from previous electrical systems used for integral Venetian or pleated blinds. It allows (by means of an encoder) the simultaneous and synchronised operation of several blinds, along with the accurate tilting of the slats. No other control device is applied on glass or window frame – instead, the motor is activated by means of wall-mounted push buttons or an optional remote control. Manufactured from high quality materials, it combines the purity of aesthetic appearance with technical excellence.

ONE CONCEPT, FIVE CONTROL SYSTEMS, ONE ENERGY EFFICIENCY BAR

Superior energy efficiency, built-in

Warm edge spacer bars play a crucial role in double and triple glazed units by insulating the edges as they keep the panes of glass apart. Every Uni-Blinds® unit benefits from this technology, with a custom designed warm edge spacer bar by Technoform, a global leader in specialised plastic solutions.

This is a stainless steel spacer bar which is co-extruded with polypropylene to enhance the benefits of all ScreenLine® integral blinds systems with energy saving qualities – all within the perfect hermetic seal. Its design incorporates locating and guiding elements to improve functional efficiency and ensure no contact is made between the blinds and glass.

- Reduces the generation of humidity on the glass perimeter.
- Improves the thermal insulation of the profile due to its low thermal conductivity.
- Ensures a low Psi value – it halves heat transmission through the perimeter compared to a standard extruded aluminium spacer bar.
- Reduces the thermal transmittance value of the window, irrespective of the material used for the frame.

Uni-Blinds® with ScreenLine® inside is the only integral blind system with a warm edge spacer bar and is available in black as standard or light grey upon request.



COLOUR YOUR WORLD

Will they match my colour scheme?

Uni-Blinds® come in a range of colours, with Venetian blinds being available in 10 colours and Pleated blinds available in 18 colours to complement your chosen colour scheme.

Swatches available on request.

VENETIAN COLOURS



**S102
WHITE**
Standard

S102 WHITE
Solar reflection 70%
Light reflection 78%
Solar absorption 30%
Standard colour



**S125
BEIGE**

S125 BEIGE
Solar reflection 57%
Light reflection 63%
Solar absorption 43%



**S142
LIGHT BLUE**

S142 LIGHT BLUE
Solar reflection 65%
Light reflection 69%
Solar absorption 35%



**S106
YELLOW**

S106 YELLOW
Solar reflection 62%
Light reflection 72%
Solar absorption 38%



**S130
GREEN**

S130 GREEN
Solar reflection 58%
Light reflection 65%
Solar absorption 42%



**S149
CREAM**
Standard

S149 CREAM
Solar reflection 68%
Light reflection 75%
Solar absorption 32%
Standard colour



**S155
GREY**

S155 GREY
Solar reflection 42%
Light reflection 48%
Solar absorption 59%



**S157
SILVER**
Standard

S157 SILVER
Solar reflection 43%
Light reflection 44%
Solar absorption 57%
Standard colour



**S156
METALLIC
SILVER**
Standard

S156 METALLIC SILVER
Solar reflection 65%
Light reflection 62%
Solar absorption 35%

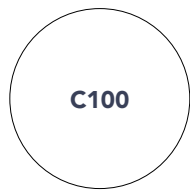


**S159
ANTHRACITE**
Exclusive

S159 ANTHRACITE
Solar reflection 12%
Light reflection 13%
Solar absorption 88%

**EXCLUSIVE
TO MORLEY
GLASS**

PLEATED COLOURS*



C100 - White
Light reflection 45%
Light transmission 50%
Absorption 5%



C010 - Beige
Light reflection 40%
Light transmission 46%
Absorption 14%



C131* - Sky Blue
Light reflection 16%
Light transmission 13%
Absorption 71%



C145* - Burgandy Red
Light reflection 11%
Light transmission 15%
Absorption 74%



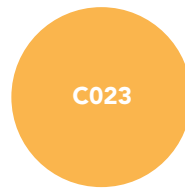
C025* - Pillar Red
Light reflection 12%
Light transmission 17%
Absorption 68%



C331* - Anthracite Grey
Light reflection 14%
Light transmission 9%
Absorption 77%



C235* - Navy Blue
Light reflection 9%
Light transmission 6%
Absorption 85%



C023* - Orange
Light reflection 38%
Light transmission 38%
Absorption 24%



C300* - Coastal Blue
Light reflection
Light transmission
Absorption



C700* - Black
Light reflection 6%
Light transmission 5%
Absorption 89%



C042* - Deep Brown
Light reflection 13%
Light transmission 12%
Absorption 75%

*Vanity pleated colours are all exclusive to Morley Glass.

SV SYSTEMS: CORDLESS SLIDER

SL20SV CORDLESS

SV SYSTEM: CORDLESS SLIDER

The Uni-Blinds® SV System has a magnetic attraction – literally! Offering sliding Venetian or pleated blinds, it features a single, cleverly designed magnetic slider to control the whole operation. Featuring a narrow slide guide on the edge of the sealed unit, a cordless magnetic slider is used to raise, lower and tilt the blind with ease.

SLIDER BENEFITS

- Closed-loop belt transmission system allows smooth and long-lasting function of the blind
- External magnetic slider is treated with the Sanitized® patented antibacterial finish, providing a long-lasting protective function
- Patented warm edge spacer bars and a plastic side profile combine to maximise energy performance of the insulating glass unit
- Fully compliant with child safety standards
- Requires only one device to raise, lower and tilt the slats



Take a look
at the SV System
on our website

Hygiene

Being treated with the world-class Sanitized® patented antibacterial finish, the external magnetic slider benefits from an active biocidal substance containing silver ions for long-lasting protection.

Energy

Perfect for a low energy home, the SV System maximises thermal insulation through its patented warm edge spacer bars and plastic side profile for optimum performance of the insulating glass unit. This delivers the best of both worlds – stylish doors and windows which save energy too.

Patented technology

Innovation goes to the core of the SV System with a patent pending system of internal cord winding on the tube which considerably reduces the blind friction.

Design

Visual appeal is maintained through a neat slider and external guide design which were developed with superior aesthetics at the fore. The result is superb looking doors and windows every time.

Lifespan

Long term peace of mind is provided by the closed-loop belt transmission system, which is designed for smooth and long-lasting function of the blind.

Versatility

You can apply the SV System to all types of door and window frames, even sliding ones, thanks to the slim dimensions of the control device.

User friendly

Operation is simple – just one device is used to raise and tilt the slats.

Safety

- Meets the requirements of child safety standards as recommended by the BBSA
- Protected with Sanitized®
- Active biocidal substance, silver ions
- Hygienic

Key benefits

- Energy saving
- Stylish design
- Patented technology
- Peace of mind
- Fitting versatility
- BBSA Safe
- User friendly

Slide guide and head rail colours



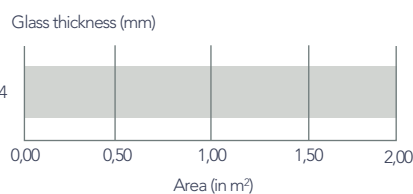
White Beige Grey Anthracite

External slider colour range



White Beige Grey Anthracite

Feasibility chart SL20SV



Possible dimensions

W min = 300mm W max = 1500mm
H min = 450mm H max = 2200mm

Maximum height possible according to width

with W = from 300 to 350mm Max H = 1670mm
with W = from 351 to 400mm Max H = 1800mm
with W = from 401 to 1500mm Max H = 2200mm

Max. O/A area 2,00m²
Max. height 2.20 high



C SYSTEM

MANUAL CONTROL

MANUAL CONTROL FOR LIGHT AND SHADE

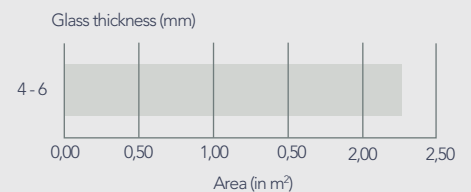
Simple, dependable and suitable for many different window and door types, the Uni-Blinds® SL20C system is one of our most popular integral blind systems.

SL20C is manufactured to the highest technical specifications and production standards to guarantee functional and aesthetic excellence that will stand the test of time. The slat raising, lowering and tilting function is achieved using a rotational magnetic transmission through the glass, thereby guaranteeing the unit's hermetic seal.

Key benefits

- Suitable for all vertical window applications
- Ideal solution for conservatory shading
- Total privacy and light control
- Gives excellent utilisation of partitioned office space
- Suitable for retro installation into existing frames
- Only viable option for bi-folding doors

Feasibility chart SL20C



Possible dimensions

W min = 300mm W max = 2000mm
H min = 300mm H max = 2600mm

Maximum height possible according to width

with W = from 300 to 350mm Max H = 1100mm
with W = from 351 to 400mm Max H = 1800mm
with W = from 401 to 450mm Max H = 2600mm
with W = from 451 to 2000mm Max H = 2600mm

Over 2.20mt in area P.O.A.

Delivered in as little as 10/12 working days

We are the only UK company able to supply this type of integral blind system within 10/12 working days for an order placed before 11am on a Friday.*

*May alter subject to national and international public/bank holidays.



Cord system



Rotational knob



Wand

C SYSTEM MANUAL CONTROL

DESIGNED TO MAXIMISE YOUR OPTIONS FOR LIGHT AND SHADE CONTROL

Be in full control of the light in your home

C System blinds operate in several different ways, and the one you choose is really down to personal preference.

Choose how to operate your Uni-Blinds® C System by:

- A rotational cord winder attached at the top of the room-facing pane of the double glazed unit.
- A 'wand', a small pole attached at the top to the room-facing pane of the double glazed unit, which is twisted to open and close the blind.
- An external magnet, fixed to the internal glass by double sided high performance adhesive, which allows for perfect alignment with an internal magnet. Raising and lowering is controlled using a continuous cord loop that drives the external magnet.
- The cord is held lightly under tension by a cord tensioner and fully complies with 'Make it Safe'.



S SYSTEM & SV SYSTEM: SLIDER CONTROL

SLIDER CONTROL VENETIAN BLINDS

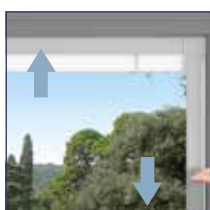
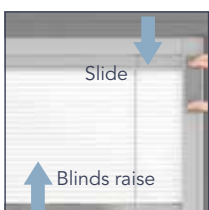
This SV Venetian blind system is manually-operated using a patented magnetic device to operate the blinds encapsulated within 20mm cavity double glazing units.

A magnetic slider, placed on the right or left-hand edge of the glass, allows the slats to be raised and tilted. The external slider logically moves in the same direction as the blind operating direction. So, the blind is raised and lowered by moving the slider down or up, and tilted by slightly lifting or lowering the same slider.

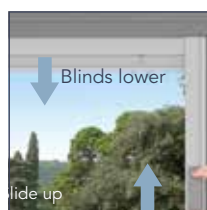


The SV System can be used in all types of window frames, even sliding ones, owing to the slim design of the control device. It is also manufactured using a warm edge spacer bar as standard, ensuring that the SV System offers high energy performance and, consequently, saves on heating and air conditioning costs.

Raising



Lowering



Tilting



W SMART: SOLAR POWERED

WIRE-FREE SOLAR POWERED, ECO-FRIENDLY SIMPLICITY WITH THE W SMART

There is no better demonstration of how Uni-Blinds® can deliver more sustainable homes and commercial buildings than with the W Smart system.

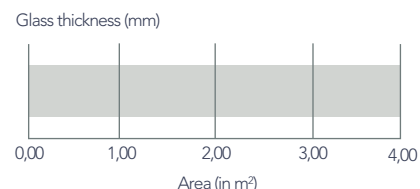
The latest in innovative and ecological Italian design, the W Smart provides you with carbon-saving motorised blinds. A 3.6V motor is powered by a lithium-ion battery charged by an externally mounted solar panel, to deliver a wire-free motorised blind system utilising Venetian or pleated blinds, encapsulated within a 20, 22, 27 or 32mm cavity double glazed unit.

The encapsulated blind is raised, lowered and slat-tilted via the slide button control unit which is magnetically attached to the double glazed unit. This device stores information about each blind, avoiding the need to associate a specific control device for a smarter, easier configuration.

The battery module is designed to achieve the best functionality too. Two LED arrows on the module intuitively show the commands given to the blind and when recharging is needed. The device is discreet too, at only 18mm thick.



Feasibility chart



Possible dimensions

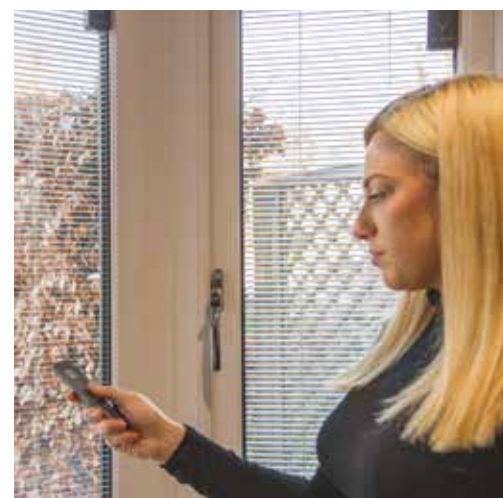
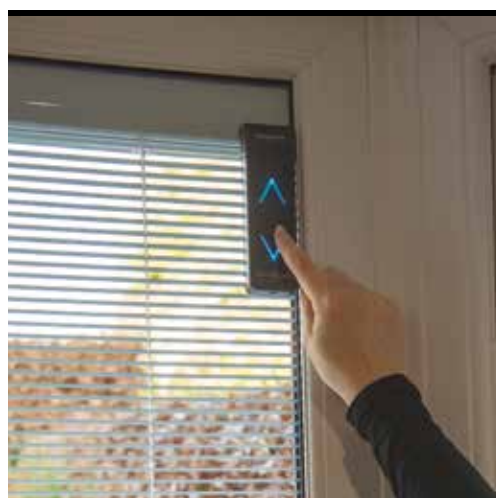
W min = 300mm W max = 2000mm
H min = 300mm H max = 2600mm

Maximum height possible according to width
Blind with raising and tilting functions

with W = from 300 to 350mm Max H = 1670mm*
with W = from 351 to 400mm Max H = 2020mm*
with W = from 401 to 2000mm Max H = 2600mm**



**Take a look
at the W Smart
on our website**



Key benefits

- Streamlined installation procedure
- No need for electrician to install
- No hard-wired power supply required
- Energy saving
- For 20, 22 and 27mm cavity, in Venetian and pleated versions
- Small sized battery module, developed in co-operation with design specialists
- Easy to operate with touch control keys
- Radio remote control supplied as standard
- Batteries easy to be replaced if required



The W Smart is powered and charged via an external solar panel

W Smart's long-life lithium-ion rechargeable batteries are contained in a stylishly designed battery module. And to provide the greatest convenience, a 99-channel remote control option is available too, which links via a radio receiver integrated in the battery module as standard.

As well as private and domestic situations, this system is particularly suited to commercial installations such as medical and educational environments, offices, schools and colleges.

MB SYSTEM: FULLY AUTOMATED

FULLY AUTOMATED PRECISION CONTROL WITH THE MB SYSTEM

Adding convenience and an extra wow factor is easy with the Uni-Blinds® MB System.

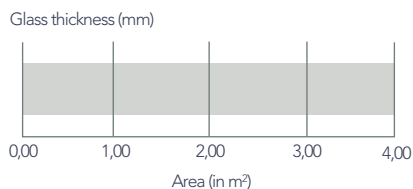
Manufactured using premium materials, this technically superior system looks great whilst operating reliably to the highest standard. Using an electric brushless motor, the MB System quietly raises, lowers and tilts the integral blinds safely, smoothly and with precision. This system is ideal for luxury domestic properties and it can be encapsulated within 20, 22 and 27mm cavity double glazed units.

The motorised Venetian or pleated blind has an internal motor integrated within the blind head-rail, incorporating a micro-control unit plus encoder, which allows simultaneous, synchronised movements of groups of blinds.

This technology integrates with a unique control box for motorised blinds developed by Morley Glass, which eliminates installation issues and provides an aesthetically pleasing solution for control at your fingertips. These control boxes are supplied pre-wired and fully tested, making for a smooth problem-free installation, and easy integration with home automation systems.

Manufactured from high quality materials, coupled with the purity of aesthetic appearance and technical excellence, the Uni-Blinds® MB System is perfect for prestigious projects, especially the exclusive contemporary domestic market.

Feasibility chart

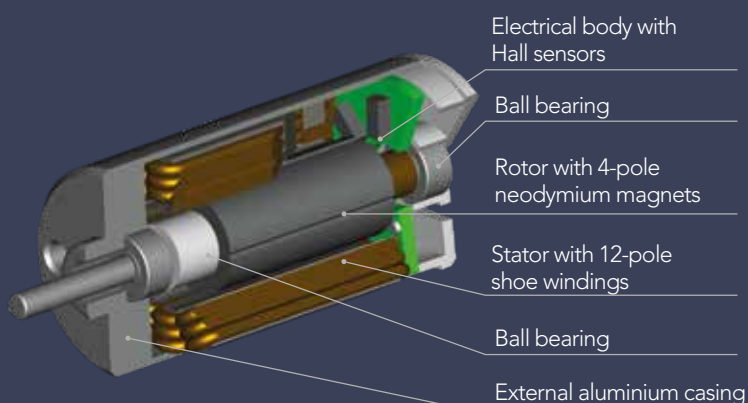


Possible dimensions

W min = 300mm W max = 2000mm
H min = 300mm H max = 2600mm

Maximum height possible according to width

with W = from 300 to 350mm Max H = 1670mm*
with W = from 351 to 400mm Max H = 2020mm*
with W = from 401 to 2000mm Max H = 2600mm**



C & S PLISSÉ: PLEATED BLINDS

PLEATED BLINDS: A HIGH PERFORMANCE ALTERNATIVE

Uni-Blinds® integral pleated blinds are the number one choice for homeowners

Our stylish, made-to-measure pleated blinds are manufactured from an exquisite woven polyester fabric in a wide range of colour options to perfectly complement any interior. Enabling a soft diffusion of light, Uni-Blinds® integral pleated blinds are an attractive, elegant blind solution with a number of practical benefits. Not least, with their concertina folds, pleated blinds fold neatly away to provide you with the clearest views – perfect for any window or conservatory.

A double glazing unit with integrated Uni-Blinds® is an excellent screen against solar radiation, allowing you to quickly and easily adjust the internal environmental lighting level. They are an important addition to any home as standard double glazing units will usually not do enough to guarantee correct control of solar energy.

Uni-Blinds® integrated pleated blind systems filter the light with ease, providing a stable internal temperature and maintaining visual comfort by reducing glare whatever the season.



SL20SP Plissé



SL20 Plissé



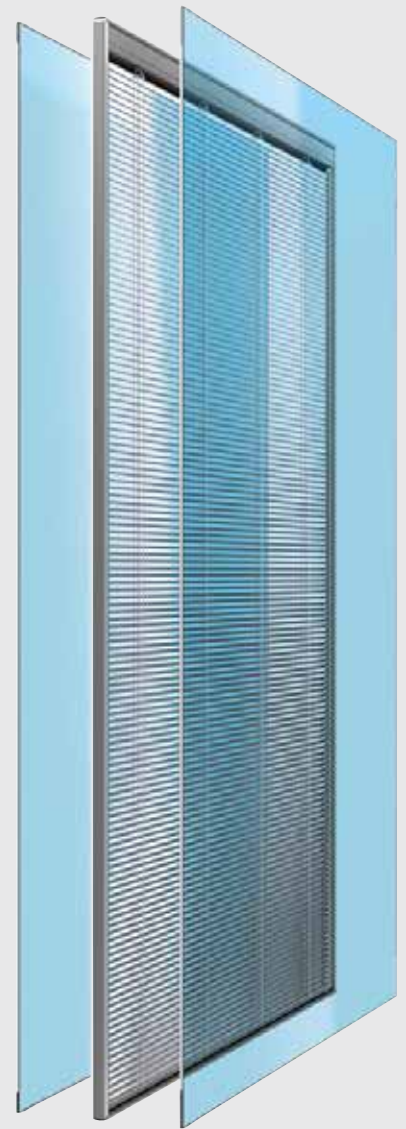
PIONEERING SLIMLINE INTEGRATED BLIND SYSTEMS

UK's first integrated blind system in 16mm cavity

High quality integral blinds are now available for windows and doors which feature a thinner sealed unit thanks to the development of the Uni-Blinds® SL16S and SL16C venetian blinds systems. Providing the perfect solution for composite doors and vertically sliding sash windows in particular, both systems utilise 10mm slats within a 16mm sealed unit to provide slimline Uni-Blinds® options that break new ground in solar shading.

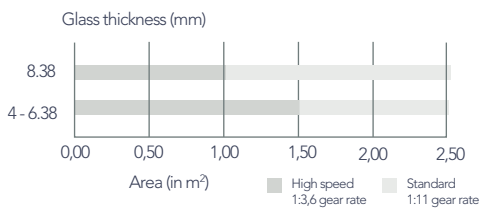
- Exclusive 10mm slats
- Every component expressly designed for a 16mm cavity
- Subtle, elegant appearance for ultimate visual appeal
- IG units with SL16 integrated blind systems can be installed without replacing most existing window frames
- Choice of slider or cord control systems
- Three standard colours available – S102 White, S149 Cream and S157 Silver

"Uni-Blinds® integrated blinds have quickly become the obvious choice for bi-fold and sliding doors thanks to their neat containment which doesn't impair the opening and closing of the doors. Our new slimline SL16S and SL16C systems are repeating this success in vertically sliding sash windows and composite doors which really don't lend themselves to externally mounted blinds."



Simple, safe and secure

Feasibility chart SL16S & SL16C



Possible dimensions

W min = 300mm W max = 1200mm
H min = 300mm H max = 2200mm

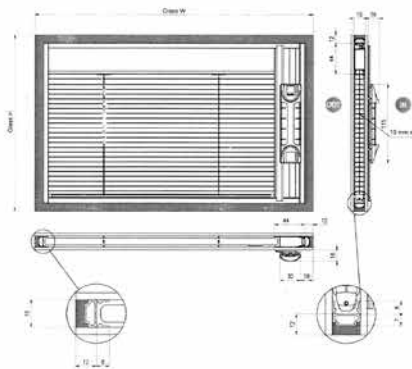
Maximum height possible according to width

with W = from 300 to 370mm Max H = 1500mm*
with W = from 371 to 1200mm Max H = 2200mm**

* Up to H=2200mm, blind supplied with tilt-only function and locked bottom rail (SL16A)

** For areas from 2.51 m² (2.01m² with 8.38 internal glass thickness) to 2.64 m², blind supplied with tilt-only function and completely raised.

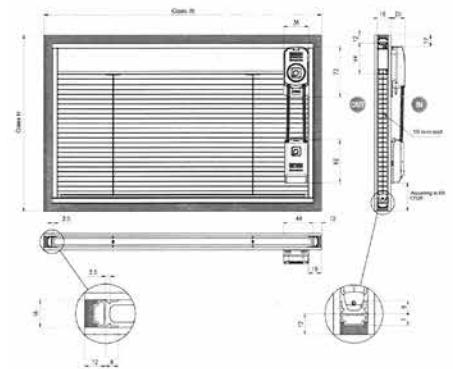
SL16S VENETIAN BLINDS – slider control



Possible dimensions

W min = 300mm W max = 1200mm
H min = 500mm H max = 2200mm

SL16C VENETIAN BLINDS – exclusive cord control



Maximum height possible according to width

with W = from 300 to 370mm Max H = 1000mm
with W = from 371 to 1200mm Max H = 2200mm*

* For areas from 1.61 m² to 2.4m², blind supplied with tilt-only function and completely raised.

COMMERCIAL & PUBLIC BUILDING SOLUTIONS

B SYSTEM

The Uni-Blinds® B System is a patented manual magnetic blind system manufactured by Morley Glass. The Venetian blinds are encapsulated within a 20 or 22mm cavity with tilt only function.

An external magnetic device is placed on the glass on the lower based rail. Motion is transmitted via two gears located in the top and bottom corner keys of the blind, which are connected to each other by means of a shaft which is completely concealed inside the spacer bar.

The B system is particularly suitable for windowsill applications, such as structural facades, hospital wards and schools as the control device is located at the bottom of the blind, making it readily accessible from a low level or seated position.



P SYSTEM

The P System comprises a Venetian blind incorporating a 12.5mm slat designed to be integrated in a double glazed unit with a 20mm cavity.

The manual tilt only function is operated via a wire drive and an external knob. The specially designed corner key containing the rotational magnet is connected to the external knob by a flexible drive cable located within the glazing cavity of the window frame. Due to the narrow cavity (20mm), the system can be used in almost all types of existing window frames, whilst the special design allows the aesthetic quality to be maintained in whatever environment it is installed. The only visible control is the external knob fixed to the window frame, allowing the glass surface to remain completely free and easy to clean.

These particular features make the P System ideal for public environments such as hospitals or government offices where a variety of people need to operate this simple but highly protected system. It can also be modified to incorporate a 16mm slat for integration in a 24mm cavity unit.



GLAZING OPTIONS



Double and triple glazed sealed units are available featuring:

- Planitherm Total+
- Planitherm One
- Planitherm 4S
- COOL-LITE SKN 176 II
- COOL-LITE SKN 183

The Planitherm series is used for all our EcoClear Plus double and triple glazed sealed units to deliver windows and doors with wide ranging aesthetic and comfort benefits. These include:

- Helping to eliminate cold areas around windows, resulting in greater comfort
- Reducing incidence of condensation on the inner pane
- A neutral appearance in both transmission and reflection
- Maximising natural daylight
- Maximising use of living and working areas
- Reducing UV light to dramatically slow the sun's fading effect on furniture and furnishings

All our sealed units are manufactured by combining Planitherm with either Planiclear or Diamant products from Saint-Gobain Glass.

In addition to Planitherm, we offer Saint-Gobain's enhanced solar control glass products, COOL-LITE SKN 176 II and SKN 183. The exact SKN specification of your sealed unit will depend on the application, not least the size and orientation of the window or door. For the best result, just talk to us and we will provide all the support you need to achieve the best result.

PLANITHERM TOTAL+

Achieve the perfect balance with Europe's leading low-E glass.

The difference is clear with Planitherm Total+. This high quality glass combines excellent thermal performance with the ultimate in clarity thanks to a virtually invisible, microscopically thin coating.

Planitherm Total+ sealed units are the ideal solution for general fenestration requirements given their compatibility for windows and doors which are 'A' rated under the Window Energy Ratings (WERs) scheme.

With its advanced qualities from a trusted glass manufacturer, it is no surprise that Planitherm Total+ is one of the most widely used and best performing energy efficient window glass products available today.

Enhanced thermal insulation

Double glazed units incorporating Planitherm Total+ offer up to three times more insulation than standard double glazing, and significantly better thermal insulation compared to hard coated low-E products. This will deliver considerable savings on heating bills and eliminate cold areas around windows.

More comfortable, healthier homes

Planitherm Total+ also maximises the amount of natural light into the home, without haze or tint effects, and it helps to reduce condensation on the inner pane.

Sustainable and fully compliant

With its superb insulation qualities, Planitherm Total+ is an environmentally sustainable choice. By keeping more warmth inside the home, energy usage and, hence, CO2 emissions can be reduced. These sealed units are also fully compliant with current Building Regulations requirements for all frame types or designs, and exceptional Window Energy Rating (WER) performance is achieved thanks to the optimised balance between a very low U-value and even higher solar gain.

QUICK FACTS

- Market-leading low-E glass
- Ideal for general fenestration requirements
- Maximises natural daylight and delivers comfortable homes



Read more about
Planitherm Total +
on our website

BOOST YOUR NATURAL LIGHT

Planitherm has the best light transmission properties compared to all competitor products.

No unsightly tint or 'haze' effect – unlike traditional low-E coatings that suffer from an unsightly yellow tint, Planitherm Total+ looks very clear. This delivers great looking windows as curtains or Georgian Bars will not look dirty or discoloured.

More light – reduced tint also means more light can enter the room, making it feel more natural, comfortable and luminous.



Technical specifications

Performance Data	DGU		TGU	
Internal Pane	SGG PLANITHERM TOTAL+			
External Pane	SGG PLANICLEAR	SGG DIAMANT	SGG PLAINICLEAR	SGG DIAMANT
Composition in mm	4(16)4		4(16)4(16)4	
Low-Emissivity Coating Position	Face 3		Face 3/5	
Light Transmission	81%		72%	73%
Light Reflectance	12%		16%	
LRi	13%		16%	
T	64%	66%	52%	53%
RE	20%	21%	25%	26%
A1	6%	3%	6%	3%
A2	9%	10%	11%	11%
A3	-	-	6%	7%
g-value	0.73	0.75	0.63	0.64
Shading Coefficient	0.83	0.86	0.72	0.74
U-value in W/m ² K** - Air	1.4		0.8	
90% Argon	1.2		0.6	

SGG PLANITHERM TOTAL+ meets the durability requirements of class C or European standards EN 1096 and is marked.

* Light and solar performance according to EN 410.

** Centre-pane U-values have been rounded in accordance with EN 673.

For Window Energy Ratings simulators should calculate whole window U-values from first principals using normal surface emissivity (e = 0.05).

PLANITHERM ONE

Enhanced thermal insulation

- An optimum centre-pane U-value of 1.0W/m²K (16mm, 90% argon-filled cavity), comfortably meeting current Building Regulations requirements for the whole window U-value for all frame types.
- Ideal for residential new build, plus light commercial new build and renovation projects using steel or aluminium frames.
- Scope for considerable reductions in heating requirements versus standard glass.
- Environmentally friendly solution, given the lower CO₂ emissions associated with reduced energy consumption.



Read more about
Planitherm One
on our website

Technical specifications

Performance Data	DGU		TGU
Internal Pane	SGG PLANITHERM ONE T		SGG PLANITHERM ONE T
External Pane	SGG PLANICLEAR		SGG PLANICLEAR
Composition in mm	4(16)4	6(16)6	4(16)4(16)4
Coating Position	Face 3		Face 3/5
Light Transmission	70%	69%	55%
Light Reflectance	21%	21%	30%
LRi	23%	23%	32%
g-value	0.55	0.54	0.42
Shading Coefficient	0.63	0.62	0.49
U-value in W/m ² K** - Air	1.3	1.3	0.7
90% Argon	1.0	1.0	0.5

SGG PLANITHERM ONE meets the durability requirements of class C or European standards EN 1096. Light and solar performance are in according with EN 410.

* Positioning the coating on Face 2 reduces the g-value in DGU to 0.49 (4mm) and 0.48 (6mm).

Superior performance 'single-stock' low-E glass with an optimum centre-pane U-value of 1.0 W/m²K

Designed specifically to minimise heat loss, Planitherm One is ideal for achieving the lowest U-values. The advanced coating of Planitherm One offers insulating levels far in excess of the minimum requirements set out in Approved Document L of the Building Regulations.

Its excellent performance capability is in the name – a double glazed sealed unit featuring Planitherm One will deliver an optimum centre-pane U-value of 1.0W/m²K (16mm, 90% argon-filled cavity).

If higher thermal insulation levels are your goal, Planitherm One represents the perfect choice. It is the most advanced thermal insulation performance within the Planitherm family, Europe's best selling low-emissivity (low-E) glass and one of the UK's leading offline low-E coating brands.

Comfort and aesthetics

- Helps to eliminate cold areas around windows resulting in greater comfort
- Reduces incidence of condensation on the inner pane
- Neutral appearance in both transmission and reflection
- Maximises entry of natural daylight
- Maximises use of living and working areas.

QUICK FACTS

- Perfect for achieving the lowest U-values
- The Planitherm choice for maximum energy efficiency
- Neutral appearance for superb visual appeal



PLANITHERM 4S



Transform a conservatory into a space that's comfortable all year round.

There is no better glazing solution for conservatory side walls than Planitherm 4S. This special option in the market-leading Planitherm family from Saint-Gobain offers a high level of thermal insulation in colder months, whilst being able to manage the risk of excess heat gain even in the strongest, direct summertime sunshine.

That's why we call it "4 Seasons" – whatever time of year, Planitherm 4S has the right blend of multifunctionality to provide an effective solution.

Planitherm 4S is designed for use in double glazed units in all frame types for both residential new-build and replacement markets, ideally for:

- Windows and skylights in residential buildings and private domestic housing
- Conservatories and patio doors.

Why choose Planitherm 4S?

- Thermal insulation: reduces heat loss more effectively than traditional low-E products
- Solar protection: reflects up to 56% of solar heat gain through conservatory sidewalls and as much as 79% when used in conjunction with Bioclean Aqua in the roof areas
- Energy efficient: energy consumption for a conservatory can be reduced by as much as 28%, meaning that Planitherm 4S can deliver homes with lower CO2 emissions that cost far less to run
- Visual comfort: maximum natural light and reduced glare enhances how the conservatory or room looks
- Neutral appearance: beautiful neutral appearance provides consistency with the glazing in the rest of the property

QUICK FACTS

- No better choice for conservatory side wall glazing
- Dual purpose insulation for winter warmth and summer cooling
- Up to 79% solar reflection when used in conjunction with Bioclean Aqua roof glazing

ALL YEAR ROUND BENEFITS

Use Planitherm 4S in a conservatory and experience some remarkable benefits:

STAY COOL IN SUMMER

For ROOFS when combined with special dual-coated self-cleaning and solar control glass

- Heat reflection 71%
- Glare Reduction

If used alone in SIDEWALL double glazing

- Heat reflection 57%
- Attractive neutral appearance

KEEP WARM IN WINTER

For ROOFS when combined with special dual-coated self-cleaning and solar control glass

- Less heat loss compared to ordinary double glazing 63%
- Reduced condensation
- Save pounds on your heating bills
- Cold spots and drafts reduced
- Unbeatable thermal-insulating U-value of 1.0 W/m²K

Technical specifications

Application	Inner pane	Outer pane	Heat reflection	Glare reduction	U-values	Reduced condensation	Naturally self-cleaning
Roofs	Bioclean AQUA	Planitherm 4S	78%	68%	1.0 (W/m ² k)	✓	✓
Roofs	Bioclean NATURA	Planitherm 4S	71%	63%	1.0 (W/m ² k)	✓	✓
Roofs	Bioclean AZURA	Planitherm 4S	67%	53%	1.0 (W/m ² k)	✓	✓
Roofs	Bioclean SOLARA	Planitherm 4S	66%	58%	1.0 (W/m ² k)	✓	✓
Roofs	Planitherm 4S	Float glass	57%	35%	1.0 (W/m ² k)	✓	



Your glass. Our world.



Read more about Planitherm 4S on our website

COOL-LITE SKN 176 II



NEUTRAL APPEARANCE

The special microscopic coating applied to COOL-LITE SKN 176 II allows for clarity and neutrality, with no unwelcome tint which can detract from a building's looks. It is designed to optimise light transmittance too, reduces the requirement for interior lighting during daylight hours – this helps reduce energy costs and CO2 emissions even further.

APPLICATIONS

COOL-LITE SKN 176 II is for use in residential or commercial buildings, either for façades or overhead glazing. The 4mm option is perfect for use in high end residential and low end commercial applications, providing extended functionality and design flexibility whilst retaining excellent neutral aesthetics.

Technical specifications

Performance Data	DGU with SGG COOL-LITE SKN 176 II
Internal Pane	SGG PLANICLEAR
External Pane	SGG COOL-LITE SKN 176 II
Composition in mm	6(16)6
Coating Position	Face 2
Light Transmission	70%
Light Reflectance	13%
LRi	15%
g-value*	0.37
Shading Coefficient	0.43
U-value in W/m ² K Air	1.3
90% Argon	1.0

SGG COOLLITE SKN 176 II meets the durability requirements of class C or European standards EN 1096-1 and -2.
* Light and solar performance according to EN 410.



Your glass. Our world.



Read more about
COOL-LITE SKN 176 II
on our website

COOL-LITE SKN 183



For next generation performance with the best ever level of glass neutrality, Morley Glass offers the highly advanced COOL-LITE SKN 183 from Saint-Gobain.

COOL-LITE SKN 183 is the latest addition to our glass portfolio, ensuring you have access to the most innovative types of solar control glass on the market. Ideal for façade glazing, such as curtain walls, window band facades and punctuated facades, the glass stands out for its clarity and low reflection, enabling natural light to fill a room or building without the risk of overheating on sunny days.

THE CLEAREST CHOICE

Commercial, public and residential buildings can all benefit from COOL-LITE SKN 183, particularly those where high daylight income is desired to achieve a bright interior atmosphere, with no compromise on performance. Typical of the applications suited to this type of glass are:

- Educational facilities where daylight helps students focusing and learning
- Hospitals where daylight is a healing factor and source of well-being
- Mixed-use projects (commercial and residential applications in the same building) where the window/wall ratio is often smaller, thus limiting the amount of daylight coming through the façade.

COOL-LITE SKN 183 delivers its outstanding selectivity thanks to a highly advanced double-silver coating which is applied to the glass by Saint-Gobain Glass. This is the key to providing the best of both worlds, enabling a neutral appearance and 75% light transmission without compromise.

COOLING EFFECT FOR ZERO-CARBON BUILDINGS

In addition to excellent light transmission, COOL-LITE SKN 183 provides very effective solar protection with a solar factor of 0.40 in double glazed units (DGUs). This enables façade design that can help meet top-class energy performance objectives while maintaining a cool, comfortable internal environment for occupants. This reduces the requirement for energy-consuming air-conditioning, hence making COOL-LITE SKN 183 ideal for clients who are seeking to create the greenest buildings.



**Read more about
COOL-LITE SKN 183
on our website**

QUICK FACTS

- A market leading light transmission level of 75% (TL).
- Low solar factor (40%), high selectivity ($S = 1.88$) and neutral aesthetics.
- Proven carbon-saving solar control performance making it ideal for high-end residential and low energy commercial buildings.

SUPERIOR THERMAL PERFORMANCE

The advanced coating developed for COOL-LITE SKN 183 also enables clients to reduce their energy consumption in winter months. The dual-action of reflecting excessive heat from the sun and providing excellent thermal insulation when external temperatures drop, keeps a building's climate stable and comfortable. Heating loads are reduced in winter as a result of the product's excellent thermal insulation levels with a Ug value of 1.0 W/m²K.

TECHNICAL SPECIFICATIONS

Performance Data	COOL-LITE SKN 183 & SKN 183 II
Internal Pane	PLANICLEAR
External Pane	COOL-LITE SKN 183 & SKN 183 II
Composition in mm	6(16)4
Coating Positions	Face 2
LT	75%
LRe	12%
LRi	13%
g-value*	0.40
U-Value in W/m ² K	1.0
Air	1.0

COOL-LITE SKN 183 & 183 II meets the durability requirements of class C of European standards EN 1096-1 and -2.

LUMINOUS FACTORS

Light transmission (TL %) 74.6 %
 Outdoor reflection (RLe %) 12.0 %
 Indoor (RLi %) 13.0 %

SOLAR FACTORS

Solar factor (g) 0.3996
 Shading Coefficient (SC) 0.4594

COLOUR RENDERING

Transmission (Ra) 95.8
 Reflection (Ra) 84.7

ENERGY FACTORS

Transmission (Te) 38.0 %
 Reflection (Ree) 33.8 %
 Indoor (Rei) 38.4 %
 Absorption (AE1) 27.3 %
 Absorption (AE2) 1.0 %

THERMAL TRANSMISSION

Ug 1.040 W/m².K

0° related to vertical position

MANUFACTURING SIZES

Nominal thickness 26.0 mm
 Weight 25.0 kg/m²

ACOUSTICS

Acoustic values according to EN 12758 and from notified body

CIE (15-2004)

74.6 %

12.0 %

13.0 %

EN410 (2011-04)

0.3996

0.4594

CIE (15-2004)

95.8

84.7

EN410 (2011-04)

38.0 %

33.8 %

38.4 %

27.3 %

1.0 %

EN673 (2011-04)

1.040 W/m².K

26.0 mm

25.0 kg/m²

EN12758

Rw(C;Ctr) = 35(-1;-5) dB



CONSERVATORY GLASS



Your glass. Our world.

CONSERVATORY GLASS

Deliver the perfect conservatory with our outstanding glass range from Saint-Gobain.

The choice of glass for the roof and sidewalls has a major impact on the overall feel and comfort of a conservatory, so it is vital to consider the options.

Whether it is a new conservatory, a refurbishment or upgrade, today's advanced glass options will enable you to deliver a fantastic space every time. Whether the conservatory is primarily to add extra relaxation space that can be used year round, a dining room, a children's playroom, home office or similar, the glazing specification will need to take into account thermal, light transmission and solar gain factors.

Morley Glass offers the Bioclean range and Planitherm 4S from Saint-Gobain Glass to give you the flexibility to accommodate any conservatory requirement.



HEAT REFLECTION

Measured by taking the opposite or inverse of the glazing solar factor. Solar factor is the percentage of the total solar radiant heat energy entering the room through the glass. Bioclean reflects up to 78% of the sun's heat, keeping the conservatory up to 9°C cooler in the summer.



THERMAL INSULATION

A measure of the rate of heat loss through the glazing. A principle reason for installing energy efficient glass, the lower the U-value the better the glass is at retaining heat. Bioclean is 63% better insulating than standard glass, keeping the conservatory warmer in winter and saving money on heating bills.



SELF-CLEANING GLASS

Why not integrate self-cleaning glass? This features a coating that is fully integrated into the surface of the glass ensuring its permanency. In a process called 'catalysis' the coating uses UV rays from the sun to break down organic dirt and turns the surface hydrophilic. Rain or hose pipe water then forms a sheet of water and rinses the dirt away, reducing the need for manual cleaning. Also prevents water droplets from forming which means clear views, even when it's raining.



GLARE REDUCTION

Measured by the inverse of 'light transmission', the proportion of the visible light spectrum that is transmitted through the glass. It is important to reduce the transmission of concentrated light, especially in the roof, to maximise visual comfort. Bioclean reduces up to 68% of the sun's glare, maximising visual comfort on the brightest of days. Like sunglasses for the roof!



VIRTUAL ELIMINATION OF CONDENSATION

Internal condensation will only begin to form at an average external temperature of -11°C (in timber/PVCu frames at an internal temperature of 20°C and 50% relative humidity). Bioclean is designed to prevent this.



Making the right choice

Choosing the right glass is perhaps one of the most important decisions in a conservatory design and build, but it needn't be a tough one. Take a look at the following comparison chart, designed to help you choose the perfect combination of Saint-Gobain Glass products exactly match your specific criteria.

Application	Inner pane	Outer pane	Heat reflection	Glare reduction	U-values	Reduced condensation	Naturally self-cleaning
Roofs	Bioclean AQUA	Planitherm 4S	78%	68%	1.0 (W/m ² k)	✓	✓
Roofs	Bioclean NATURA	Planitherm 4S	71%	63%	1.0 (W/m ² k)	✓	✓
Roofs	Bioclean AZURA	Planitherm 4S	67%	53%	1.0 (W/m ² k)	✓	✓
Roofs	Bioclean SOLARA	Planitherm 4S	66%	58%	1.0 (W/m ² k)	✓	✓
Roofs	Planitherm 4S	Float glass	57%	35%	1.0 (W/m ² k)	✓	

BIOCLEAN SELF-CLEANING CONSERVATORY ROOF GLASS

Enjoy the view without the hassle of cleaning a conservatory roof

Our Bioclean self-cleaning glass option is the perfect way to make use of technology to cut down on maintenance and cleaning hassles.

This revolutionary self-cleaning coating is applied to the glass as part of the manufacturing process, meaning that it is fused to the surface of the glass. This ensures Bioclean lasts the lifetime of the pane.

The special Bioclean coating uses both rain and natural light from the sun to efficiently combat the dirt and grime that accumulates on the outside of the window. By significantly reducing the need for manual cleaning, it provides the ideal solution for keeping those hard or dangerous to reach areas clean, leaving householders with more time to relax and enjoy the view.

Tint options

Bioclean is available in a choice of four tint options to match your precise specification requirements and deliver the perfect solution every time.

How Bioclean self-cleaning glass works

There are several processes at work:

- The special coating harnesses natural daylight which triggers the breakdown of the dirt and grime on the outer surface of the glass.
- When rainwater hits the glass, rather than forming droplets it flattens and spreads out across the surface of the glass helping to wash away the loosened dirt and grime.
- This sheeting effect also minimises spots and streaks by helping the glass to dry more quickly and evenly.



CONSERVATORY GLASS

Self-cleaning glass advantages

- The permanent self-cleaning coating lasts the lifetime of the window
- Perfect for conservatory roofs and other hard to reach areas
- Glass stays cleaner for longer
- Less dirt and grime adheres to the glass, so any cleaning is quick and easy
- Ongoing cost savings with reduced window cleaning bills
- Kinder to the environment with a less frequent use of water and detergents
- Clear view outside even when it's raining thanks to the sheeting effect



AQUA

A pleasant, relaxing aqua green appearance to complement interiors and surrounding natural garden tones.



NATURA

A virtually neutral glass to complement existing glazing.



AZURA

An attractive blue tint.



SOLARA

A bronze tint which is ideal for timber and dark conservatory frames.